WE CLAIM:

1.   A system for providing a flexible, extensible, customizable platform for e-commerce applications comprising:

a customizable presentation framework for receiving data from a server and communicating the data to a plurality of extensible modules;

5   a plurality of extensible modules, each module communicatively connected to a software bus and to the customizable presentation framework; and

a software bus communicatively coupled to a plurality of services, the software bus enabling communication between the plurality of extensible modules and the plurality of services.

2.   The system according to claim 1, wherein the server is a J2EE compliant servlet engine.

3.   The system according to claim 1, wherein the server is a J2EE Enterprise Java Bean application server.

4.   The system according to claim 1, wherein each module includes a manager object for interfacing with the customizable presentation framework.

5.   The system according to claim 1, wherein the plurality of extensible modules includes at least one of an auction module, a catalog module, a pricing module, a negotiation module, a community module, an exchange module, and an order management (OMS) module.

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6.   The system according to claim 1, wherein each module further includes a plurality of fine grain objects, the fine grain objects representing data utilized by the module.

7.   The system according to claim 6, wherein the fine grain objects include persistent objects.

8.   The system according to claim 1, wherein each module further includes a remotable object which interfaces with the software bus.

9.   The system according to claim 8, wherein the remotable object includes a stateless session bean.

10.   The system according to claim 1, wherein the plurality of services include at least one of data access, notification, internationalization, auditing, reporting, configuration, transaction, query assistant, attachments, exception handling, and security.

11.   The system according to claim 1, wherein each of the plurality of extensible modules may be packaged independently and communicatively connected to the software bus.

12.   The system according to claim 11, wherein each of the plurality of modules includes a notification module.

13.   The system according to claim 1, wherein each of the plurality of extensible modules may depend upon any other of the plurality of extensible modules for communication with the software bus.

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14.   The system according to claim 13, wherein each of the plurality of modules includes at least one of a catalog module, a pricing module, an OMS module, and an auction module.

15.   The system according to claim 14, wherein the catalog module is communicatively connected to the software bus, the pricing module is communicatively connected to the catalog module, the OMS module is communicatively connected to the pricing module, and the auction module is

5   communicatively coupled to the catalog module.

16.   An extensible module for performing e-commerce functions comprising:

        a manager object for receiving data from a customizable presentation framework connected to a server;

        a plurality of fine grain objects which are dynamically generated by the

5   manager object and are passed as parameters to a remotable object; and

        a remotable object for performing actions on behalf of the fine grain objects and interfacing with a software bus, the software bus enabling communication between the extensible module and a plurality of services.

17.   The extensible module according to claim 16, wherein the plurality of fine grain objects include persistent objects.

18.   The extensible module according to claim 16, wherein the plurality of fine grain objects represent data used by the extensible module.

19.   The extensible module according to claim 16, wherein the remotable object includes a stateless session bean.

20.   The extensible module according to claim 16, wherein the plurality of services include at least one of data access, notification, internationalization, auditing, reporting, configuration, transaction, query assistant, attachments, exception handling, and security.

21.   The extensible module according to claim 16, wherein the extensible module is an auction module.

22.   The extensible module according to claim 21, wherein the plurality of fine grain objects include bids and auction items.

23.   The extensible module according to claim 16, wherein the extensible module is a negotiation module.

24.   The extensible module according to claim 23, wherein the plurality of fine grain objects include bids and quotes.

25.   The extensible module according to claim 16, wherein the extensible module is a catalog module.

26.   The extensible module according to claim 25, wherein the plurality of fine grain objects include catalog items.

27.   The extensible module according to claim 16, wherein the extensible module is a community module.

28.   The extensible module according to claim 27, wherein the plurality of fine grain objects include users, groups and resources.

29.   The extensible module according to claim 16, wherein the extensible module is a pricing module.

30.   The extensible module according to claim 29, wherein the plurality of fine grain objects include trading agreements.

31.   The extensible module according to claim 16, wherein the extensible module is an exchange module.

32.   The extensible module according to claim 16, wherein the extensible module is an order management (OMS) module.

33.   The extensible module according to claim 32, wherein the plurality of fine grain objects include requisitions.

34.   A software bus for providing a plurality of services to a plurality of extensible modules comprising:

a standard interface for providing access to the plurality of extensible modules;

a service interface for providing common access to the plurality of services; and

a server independent communication means for enabling communication between the plurality of extensible modules and the plurality of services.

35.   The software bus according to claim 34, wherein the plurality of modules include at least one of an auction module, a catalog module, a pricing module, a negotiation module, a community module, an exchange module, and an order management (OMS) module.

36.   The software bus according to claim 34, wherein the each of the plurality of modules can be added or removed from the software bus.

37.   The software bus according to claim 34, wherein the plurality of services include at least one of data access, notification, internationalization, auditing, reporting, configuration, transaction, query assistant, attachments, exception handling, and security.

38.   A method of providing a flexible, extensible, customizable platform for e-commerce applications comprising the steps of:

inputting data to a customizable presentation framework, the customizable presentation framework communicatively connected to a plurality of

5   extensible modules;

selecting actions to be performed on the data, the selected actions implemented by the plurality of extensible modules; and

accessing a plurality of services via an interface between the plurality of extensible modules and a software bus, the software bus communicatively

10   coupled to the plurality of services.

39.   The method according to claim 38, wherein the customizable presentation framework is connected to the plurality of extensible modules via an interface with a manager object contained in each of the plurality of extensible modules.

40.   The method according to claim 38, wherein the customizable presentation framework operates independently from the plurality of extensible modules and the software bus.

41.   The method according to claim 38, wherein the selected actions are implemented by passing the data and at least one of a plurality of fine grain objects to a remotable object located in each of the plurality of extensible modules.

42.   The method according to claim 38, wherein the plurality of extensible modules include at least one of an auction module, a catalog module, a pricing module, a negotiation module, a community module, an exchange module, and an order management (OMS) module.

43.   The method according to claim 41, wherein the plurality of fine grain objects include persistent objects.

44.   The method according to claim 41, wherein the remotable object includes a stateless session bean.

45.   The method according to claim 38, wherein the selected actions include at least one of submit, revise, cancel, and close.

46.   The method according to claim 38, wherein the plurality of services include at least one of data access, notification, internationalization, auditing, reporting, configuration, transaction, query assistant, attachments, exception handling, and security.